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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,460	10/03/2003	Yasuhiro Ii	6453P011	3333

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EXAMINER	
SMITH, JEFFREY S	
ART UNIT	**PAPER NUMBER**
2635	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/22/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/678,460	LI, YASUHIRO	
	Examiner	Art Unit	
	Jeffrey S. Smith	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 03 October 2003.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-18 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 03 October 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 10, 15 and 18 are objected to because of the following informalities:

For claim 10, "unitto" should be "unit to."

For claim 15, "process and image" should be "process an image."

For claim 18, the preamble recites a method. This claim should have a transitional phrase such as "the method comprising" in between the preamble and the method steps. The word "comprising" that is currently in this claim is related to the system described in the preamble, and not to the method performed by the system.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 9, 12 and 17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 7,110,608 issued to Chan et al. ("Chan").

For claim 1, Chan discloses "a resolution adjustment unit to adjust the resolution of an original image to form a resolution-adjusted image based on resolution information indicating a resolution suitable for image processing by the other computer" (see column 18 lines 41-46) and "an image transmitting unit to transmit the resolution-adjusted image to the other computer" (see Figures 6A, 6B and 6C, and column 19 line 42-column 21 line 55, which discusses creating and transmitting a codestream of an image at a desired resolution).

For claim 2, Chan discloses "the resolution adjusting unit adjusts the resolution of the original image by extracting the resolution-adjusted image from the original image stored in the computer" (see column 20 lines 3-7).

For claim 9, Chan discloses "the image transmitting unit extracts a single color component from the resolution-adjusted image, and transmits the extracted single color component to the other computer" (see column 19 lines 42-45).

For claim 12, Chan discloses a computer readable medium (see column 35 lines 6-25) that has software to "adjust the resolution of an original image" (see column 20 lines 29-35) and "transmit the resolution-adjusted image" (see column 19 line 5).

For claim 17, Chan discloses a first computer to process images and a second computer connected with the first computer via a network (see column 34 lines 1-16), wherein the second computer transmits a resolution-adjusted image where resolution has been adjusted to the lowest resolution suitable for the image processing by the first computer, to the first computer (see column 20 lines 29-35).

For claim 18, Chan discloses a method of processing an image by an image processing system comprising a first computer that processes images and a second computer connected with the first computer via a network (see column 34 lines 1-16), wherein the second computer transmits a resolution adjusted image where resolution has been adjusted to the lowest resolution suitable for the image processing by the first computer to the first computer (see column 20 lines 29-35).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 10, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan in view of U.S. Patent No. 6,023,714 issued to Hill et al. ("Hill").

For claim 3, Chan discloses the elements of base claim 1, and "an information receiving unit to receive the resolution information transmitted by the other computer" (see column 20 line 31).

Chan does not explicitly disclose "a query transmitting unit to transmit a query for the resolution information to the other computer."

Hill discloses "a query transmitting unit to transmit a query for the resolution information to the other computer" (see Figures 2 and 5 and column 11 lines 25-42).

It would have been obvious to one of ordinary skill in this art at the time of the invention to include the query transmitting unit of Hill with the digital image compression device of Chan for the benefit of dynamically formatting the image based upon the capabilities and constraints of a particular output device as taught by Hill at column 2 lines 9-11.

For claim 10, Chan discloses an image processing unit to process an image and an information transmitting unit to transmit the resolution information (see column 18 lines 41-46). Hill discloses "a query receiving unit to receive a query for resolution information from the other computer" (see column 11 lines 25-42).

For claim 13, Chan discloses the elements of base claim 12 and "receive resolution information" (see column 20 line 31). Chan does not disclose "transmit a query for the resolution information to the other computer." Hill discloses "transmit a query for the resolution information to the other computer" (see Figures 2 and 5 and column 11 lines 25-42).

For claim 15, Chan discloses a computer software that can process an image and transmit resolution information (see column 18 lines 41-46). Hill discloses software that can receive a query for resolution information from the other computer (see column 11 lines 25-42).

Claims 4-8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan in view of U.S. Patent No. 7,024,046 issued to Dekel et al. ("Dekel").

For claim 4, Chan discloses the elements of base claim 1.

Chan does not explicitly disclose a partial image transmitting unit to transmit a partial region of image to the other computer and a result receiving unit and a determining unit.

Dekel discloses "a partial image transmitting unit to transmit a partial region of image to the other computer" (see abstract, "ROI") and "a result receiving unit to receive from the other computer a result of image processing performed on the partial region of image by the other computer; and a determining unit to determine, based on the received result of image processing performed on the partial region of image, whether the resolution of the transmitted partial region of image is suitable for image processing by the other computer (see column 30, lines 33-37); wherein if the determining unit determines that the resolution of the transmitted partial region of image is suitable for image processing by the other computer, the resolution of the transmitted partial region of image is determined to be the resolution suitable for the image processing by the other computer (when the user accepts the current rendering as good enough, the server receives this indication and stops improving the resolution); and if the determining unit determines that the resolution of the transmitted partial region is not suitable for image processing by the other computer, the resolution of the transmitted partial region of image is changed to form a resolution-changed partial region, and the resolution-changed partial region is transmitted to the other computer (when the user does not accept the current rendering as good enough, the server improves the resolution)."

It would have been obvious to one of ordinary skill in the art at the time of this invention to modify the data compression device of Chan to include the partial image transmitting unit of Dekel to provide the benefit of responding to ROI requests in near real time as taught by Dekel at column 3 lines 1-4.

For claim 5, Chan discloses "the partial region of image transmitted by the partial image transmitting unit corresponds to a tile of an image encoded with the JPEG 2000 algorithm" (see column 11 lines 10-20).

For claim 6, Chan discloses "the partial region of image transmitted by the partial image transmitting unit corresponds to a precinct of an image encoded with the JPEG 2000 algorithm" (see column 10 lines 36-38).

For claim 7, Dekel transmits using JPEG 2000 (see column 1).

For claim 8, Dekel discloses "if no resolution-adjusted image satisfying the resolution information is extractable from the original image, a resolution-adjusted image of which resolution is closest to the resolution suitable for image processing by the other computer is selected" (see column 32 lines 12-17).

For claim 14, Chan discloses the elements of base claim 12. Dekel discloses transmit a partial region, receive a result, and determine based on the received result (see column 30 lines 33-37).

Claims 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan in view of Hill as applied to claims 10 and 15 above, and further in view of Dekel.

For claim 11, Chan and Hill disclose the elements of base claim 10.

Chan and Hill do not disclose a partial image receiving unit, and a result transmitting unit to transmit a result of image processing performed on the partial region.

Dekel discloses a partial image receiving unit, and a result transmitting unit (see the abstract and column 30 lines 33-37).

It would have been obvious to one of ordinary skill in the art at the time of this invention to combine the data compression device of Chan as modified by Hill with the partial image transmitting unit of Dekel to provide the benefit of responding to ROI requests in near real time as taught by Dekel at column 3 lines 1-4.

For claim 16, Chan and Hill disclose the elements of base claim 15. Chan and Hill do not disclose receiving a partial region, and transmitting a result of image processing performed on the partial region. Dekel discloses receiving a partial region, and transmitting a result of image processing performed on the partial region (see the abstract and column 30 lines 33-37).

It would have been obvious to one of ordinary skill in the art at the time of this invention to combine the data compression device of Chan as modified by Hill with the partial image transmitting unit of Dekel to provide the benefit of responding to ROI requests in near real time as taught by Dekel at column 3 lines 1-4.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Nos. 7,130,474 issued to Luo et al., 7,030,845 issued to Maa, 6,987,890 issued to Joshi et al., 6,763,139 issued to Andrew, and 6,678,420 issued to

Takeo et al. disclose methods of transmitting a lowest-resolution image suitable for image processing using JPEG 2000.

U.S. Patent Nos. 7,068,857 issued to Touchard et al., 7,062,107 issued to Crosby et al., 6,300,947 issued to Kanevsky, and 5,727,159 issued to Kikinis disclose methods of allowing a server to change the resolution of an image before transmitting the image to a client, so that the image can fit in the client's display.

U.S. Application Publication No. 2003/0086615 by Dance et al. discloses a method for adjusting the resolution of a camera for performing OCR.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey S. Smith whose telephone number is 571 270-1235. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marvin Lateef can be reached on 571 270-1245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSS

December 14, 2006
JSS

MARVIN LATEEF
SUPERVISORY PATENT EXAMINER